

09/857841

10 AUG 2001 30 AUG 2001

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SEQUENCE LISTING

<110> Fang, Rong-Xiang
Wu, Jun-Lin
Chen, Xiao-Ying

<120> ENHANCED PROTEIN PRODUCTION IN HIGHER PLANTS BY
N-TERMINAL FUSION OF A UBIQUITIN OR A CUCUMBER MOSAIC
VIRUS COAT PROTEIN PEPTIDE

<130> 2577-109

<140> 09/857,841

<141> 2001-06-11

<150> PCT/SG98/00103

<151> 1998-12-11

<160> 14

<170> PatentIn Ver. 2.0

<210> 1

<211> 235

<212> DNA

<213> Nicotiana tabacum

<220>

<221> CDS

<222> (3)..(230)

<220>

<223> Modified from wild-type to insert an SphI site in
the region encompassing the initiation codon ATG
and to insert an NcoI site following the last
codon GGC.

<400> 1

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gc atg cag atc ttc gta aag acc ctg acg ggg aag act att acc tta      47
  Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu
    1             5             10             15

gag gta gag tca tcg gac acc att gac aat gtt aag gct aag att cag      95
Glu Val Glu Ser Ser Asp Thr Ile Asp Asn Val Lys Ala Lys Ile Gln
    20             25             30

gac aag gaa ggc att cca ccg gac cag cag cgg ttg att ttc gca ggt     143
Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly
    35             40             45

aag cag ctt gag gat ggc cga aca cta gct gac tac aac atc cag aag     191
Lys Gln Leu Glu Asp Gly Arg Thr Leu Ala Asp Tyr Asn Ile Gln Lys
    50             55             60

gag tcc act ctc cat ctc gtc tta aga ctc cgc ggt ggc catgg           235
Glu Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly
    65             70             75
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<210> 2
 <211> 76
 <212> PRT
 <213> Nicotiana tabacum

<400> 2
 Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr Leu Glu
 1 5 10 15
 Val Glu Ser Ser Asp Thr Ile Asp Asn Val Lys Ala Lys Ile Gln Asp
 20 25 30
 Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys
 35 40 45
 Gln Leu Glu Asp Gly Arg Thr Leu Ala Asp Tyr Asn Ile Gln Lys Glu
 50 55 60
 Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly
 65 70 75

<210> 3
 <211> 53
 <212> DNA
 <213> cucumber mosaic virus

<220>
 <221> CDS
 <222> (6)..(47)

<400> 3
 gatcc atg gac aaa tct gaa tca acc agt gct ggt cgt aac cgt cga 47
 Met Asp Lys Ser Glu Ser Thr Ser Ala Gly Arg Asn Arg Arg
 1 5 10
 cgagct 53

<210> 4
 <211> 14
 <212> PRT
 <213> cucumber mosaic virus

<400> 4
 Met Asp Lys Ser Glu Ser Thr Ser Ala Gly Arg Asn Arg Arg
 1 5 10

<210> 5
 <211> 13
 <212> DNA
 <213> Plasmid pSKUBC1

<220>
 <221> misc_feature
 <222> ()..)
 <223> Joining region of fusion of two genes.

<400> 5
 ggccatggac aaa 13

<210> 6
 <211> 33
 <212> DNA
 <213> Plasmid pBI221

<220>
 <221> misc_feature
 <222> (1)..(33)
 <223> Joining region between 35S promoter and GUS gene.

<400> 6
 tctagaggat ccccggtgg tcagtcctt atg 33

<210> 7
 <211> 18
 <212> DNA
 <213> Plasmid pUG

<220>
 <221> misc_feature
 <222> (1)..(18)
 <223> Joining region of fusion of genes.

<400> 7
 ggccatggat ccccggtg 18

<210> 8
 <211> 18
 <212> DNA
 <213> Plasmid pUCG2

<220>
 <221> misc_feature
 <222> (1)..(18)
 <223> Joining region of fusion of genes.

<400> 8
 ctccgcggtg gcatggac 18

<210> 9
 <211> 29
 <212> DNA
 <213> Plasmid pBIubi

<220>
 <221> misc_feature
 <222> (1)..(29)
 <223> Joining region between promoter and fused gene.

<400> 9
 tctagaacta gtggatccct ggcattgag 29

<210> 10
 <211> 35
 <212> DNA
 <213> Plasmid pBIubi

 <220>
 <221> misc_feature
 <222> (1)..(35)
 <223> Final 2 codons of the ubiquitin gene followed by
 polylinker sequence.

 <400> 10
 ggaggcctgt cgactcgagc ccgggtaccg agctc 35

 <210> 11
 <211> 12
 <212> DNA
 <213> Plasmid pUL

 <220>
 <221> misc_feature
 <222> (1)..(12)
 <223> Joining region between fusion of genes.

 <400> 11
 ggaggcatgg aa 12

 <210> 12
 <211> 12
 <212> DNA
 <213> Plasmid pCL

 <220>
 <221> misc_feature
 <222> (1)..(12)
 <223> Joining region between fusion of genes.

 <400> 12
 cgtcgcatgg aa 12

 <210> 13
 <211> 29
 <212> DNA
 <213> Plasmid pBIubi

 <220>
 <221> misc_feature
 <222> (1)..(29)
 <223> Joining region of fusion of promoter and gene.

 <400> 13
 tctagaacta gtggatccct ggcattgcag 29

<210> 14
<211> 35
<212> DNA
<213> Plasmid pBIubi

<220>
<221> misc_feature
<222> (1)..(35)
<223> Joining region with multicloning sequence between
fusion of gene and terminator.

<400> 14
ggaggcctgt cgactcgagc ccgggtaccg agctc